

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
21 April 2005 (21.04.2005)

PCT

(10) International Publication Number  
**WO 2005/034727 A2**

- (51) International Patent Classification<sup>7</sup>: **A61B**
- (21) International Application Number: PCT/US2004/026872
- (22) International Filing Date: 19 August 2004 (19.08.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/495,878 19 August 2003 (19.08.2003) US  
60/496,682 21 August 2003 (21.08.2003) US
- (71) Applicant (for all designated States except US): **EAST-ERN VIRGINIA MEDICAL SCHOOL** [US/US]; P.O. Box 1980 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SOMERS, Kenneth, Donald** [US/US]; 621 Graydon Avenue, Norfolk, VA 23507 (US). **ADAM, Bao-Ling** [US/US]; 769 W. 52nd Street, Norfolk, VA 23508 (US). **WRIGHT, George, L., Jr.** [US/US]; 829 Moultrie Court, Virginia Beach, VA 23455-4752 (US). **WADSWORTH, Jeffery, Tradnor** [US/US]; 5002 Marsh Ridge Court, Suffolk, VA 23435 (US).
- (74) Agents: **WIXON, Henry, N. et al.**; Wilmer Cutler Pickering Hale and Dorr LLP, The Willard Office Building, 1455 Pennsylvania Avenue, NW, Washington, DC 20004 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: METHOD FOR DIAGNOSING HEAD AND NECK SQUAMOUS CELL CARCINOMA

(57) Abstract: Disclosed are protein biomarkers and their use in diagnosing head and neck squamous cell carcinoma (HNSCC) or to make a negative diagnosis in patients. Also disclosed are kits for the diagnosis of HNSCC that detect the protein biomarkers of the invention, as well as methods using a plurality of classifiers to make a probable diagnosis of HNSCC. In certain aspects of the invention, the methods include use of a decision tree analysis. Various computer readable media and their use according to the invention are also disclosed.

WO 2005/034727 A2